



July 2, 2007

Mr. Howard G. Borgstrom, Director  
Business Operations Center  
Office of the Chief Financial Officer  
U.S. Department of Energy  
Mailstop CF-60, Room 4A-221  
1000 Independence Avenue SW  
Washington D.C. 20585

Subject: Comments – Notice of Proposed Rulemaking DOE Loan Guarantee Program for Projects that Employ Innovative Technologies (RIN 1901 – AB21), 72 *Federal Register* 27471 (May 16, 2007)

Dear Mr. Borgstrom:

Bechtel Power Corporation ("Bechtel") is pleased to have the opportunity to comment on the Notice of Proposed Rule making ("NOPR") issued in May 2007 by the Department of Energy ("DOE") on its Loan Guarantee Program authorized by Title XVII of the Energy Policy Act of 2005 ("EPAAct 2005").

As the largest engineering, procurement, and construction company in the United States, Bechtel has over seventy (70) years experience in the power business. We are currently involved in providing engineering and design services to several companies that intend to develop, build, and operate power projects, using the technologies covered by Title XVII of EPAAct 2005. These projects include next generation nuclear energy facilities and advanced fossil energy technologies, such as IGCC, coal-to-liquids, and industrial gasification.

Bechtel believes the DOE Loan Guarantee Program is essential to support the financing of these new technologies. After reviewing the May 2007 NOPR, we believe it still does not address a number of shortcomings in the program guidelines. We believe that additional changes will be necessary for the loan guarantee program to serve as an efficient catalyst in raising sufficient levels of long term debt on commercially reasonable terms as envisioned in the legislation.

We recommend that DOE model the Loan Guarantee Program along the lines of the loan guarantee programs administered by the U.S. Export-Import Bank ("Ex-Im") and the Overseas Private Investment Corporation ("OPIC"). Both agencies operate highly effective programs that are fiscally sound and provide loan guarantees with commercially reasonable terms and conditions.

Mr. Howard G. Borgstrom, Director  
U.S. Department of Energy  
July 2, 2007  
Page -2-

Our major concerns continue to be that the proposed program guidelines:

- Limit the loan guarantees to ninety (90%) of a total value of loans extended to a project;
- Do not allow for a *pari passu* security package in which the guaranteed and non-guaranteed lenders can share equally in the loan security package; and
- Do not allow "stripping" of the non-guaranteed portion of the loan to be sold separately from the guaranteed portion.

Taken together, these three limitations will discourage lender and investor participation in the program, thereby adversely affecting its viability. We are also taking this opportunity to comment on several other provisions of the NOPR. These comments are included as an attachment to this letter.

Bechtel believes that DOE can establish a loan guarantee program that is a fiscally sound and effective in serving as a catalyst in helping the power industry raise sufficient capital on reasonable terms to meet the objectives of accelerating the development and installation of cleaner energy facilities, as envisioned by Title XVII of EPCA 2005. The power industry, given the economics involved in these advanced technologies, needs assistance and leadership from the public sector to establish the initial momentum for the commercial deployment of such advanced, emissions-friendly technologies. However, such assistance needs to be structured with a focus on financial market realities, so that the industry can successfully clear this initial hurdle and then reach self-sufficiency from a financing perspective.

Sincerely,



J. Scott Ogilvie  
President  
Bechtel Power Corporation

**Comments of Bechtel Power Corporation**  
Department of Energy Notice of Proposed Rulemaking (72 Federal Register 27471,  
May 16, 2007) Reference RIN 1901-AB21

**A. Financing Issues**

1. Percentage of Loan Guarantee Cover - EPCA 2005 Title XVII authorizes loan guarantees up to 80% of the total project costs. DOE's proposed rule limits cover to 90% of the face value of the loan amount (§609.10(d)(3)).

*Comments:* The limit of 90% coverage when combined with the no *pari passu* and no stripping provisions, creates an unworkable financing structure. We are unaware of any established and active market for a subordinated, non-guaranteed debt tranche that is sold *pro rata* with a guaranteed loan portion.

We believe it was Congress' intent that the implementing regulations should allow 100% loan guarantee coverage up to 80% of total project costs.

We strongly urge that the final rule provide for 100% guarantee coverage of the debt, up to the statutory limit of 80% of project costs. Where specific projects can support less than full coverage of the debt then such partial guarantee coverage will only be viable if *pari passu* treatment and ability to separate the non-guaranteed portion of the debt are permitted.

We also note that the U.S. Export-Import Bank ("Ex-Im") and Overseas Private Investment Corporation ("OPIC") programs do not limit coverage in such fashion.

2. Pari Passu Security Structure Prohibited - The proposed rule requires that the unguaranteed portion of the debt and any other debt brought into the project must be subordinate to the government-guaranteed debt. DOE would have a first lien position in all assets of the project and any additional collateral pledged by the borrower (§609.10(d)(13)). Upon payment under the guarantee, DOE would be subrogated to the rights of the holders and shall have superior rights in the property acquired from the holders (§609.15(g)). Recoveries are to be applied first to full payment of the government (including collection of expenses and any other claims to the Government) (§609.15(k)).

*Comments:* DOE's position that co-lenders must be fully subordinated with respect to all collateral on the non-guaranteed portion of the debt is clearly inconsistent with established norms in project lending.

It should be noted that other federal loan guarantee programs administered by the Ex-Im, OPIC and Transportation Infrastructure Finance and Innovation Act ("TIFIA") treat any non-guaranteed debt as *pari passu* in terms of both payment and security.

DOE's stance on this issue is a serious deterrent to commercial bank participation in the DOE Loan Guarantee Program.

3. Pro Rata Syndication and No Stripping - The DOE proposed rule prohibits the guaranteed portion of a loan from being separated from, or "stripped" from, the non-guaranteed portion and resold in the secondary debt market (§609.10(d)(4)).

*Comments:* As noted above, we do not believe that a commercially viable market exists for such a hybrid instrument. Moreover, this provision needlessly drives up the cost of project debt by eliminating a bank's ability to utilize various securitization vehicles, such as the Private Export Funding Corporation ("PEFCO") or Govco, Inc., the special purpose lending vehicle of Citigroup, which provide efficient and cost effective vehicles to fund federally guaranteed loans. Again, other federal agencies administering loan guarantee programs (Ex-Im, OPIC, and TIFIA) do not prohibit the separation of the guaranteed portion from the non-guaranteed portion of the loan for the purpose of syndicating or placing the debt into the secondary debt market.

As identified in our cover letter, these three issues represent the most significant hurdles to the successful deployment of a financially viable loan guarantee program. It is particularly noteworthy that such limitations are not similarly present in the Ex-Im, OPIC and TIFIA facilities.

4. Minimum Equity Percentage - In evaluating applications, DOE will consider the amount of equity committed to the project (§609.7(b)(7)), §609.10(d)(5)). Applications will be denied if the applicant does not provide a significant equity contribution (§609.7(a)(6)). DOE is considering adopting a minimum percentage of equity for projects.

*Comments:* DOE should not require a specific minimum equity percentage. In project finance, the appropriate debt to equity ratio is determined through careful analysis of various factors, including cash flow projections, market demand, power off-take arrangements, and regulatory risks.

Some municipal rate-based utilities plan to use the DOE loan guarantee program. These utilities typically do not contribute equity to projects, but, nevertheless, the projects are creditworthy because of the ability to pass through costs to the consumer through their rates. This further argues for not setting a minimum level of equity.

5. Credit Rating - DOE requires that the project sponsor obtain, at the application stage, a preliminary credit assessment of the project without a DOE guarantee from a nationally recognized rating agency (§609.6(b)(21)). In addition, DOE requires the applicant to provide, not later than 30 days prior to closing, another credit rating reflecting the final term sheet without a DOE guarantee (§609.9(f)).

*Comments:* Obtaining a credit assessment of a project without the guarantee is neither useful nor meaningful, and would only demonstrate why projects introducing

innovative technology require federal loan guarantees to obtain financing. It is recommended that DOE consider the approach taken by other federal agencies, such as OPIC and Ex-Im, which use independent engineers, market consultants, outside legal counsel, and other outside experts, paid for by the borrower, to assist in assessing credit risk, subsidy costs, loan structuring, and project documentation. This approach is more cost effective and would reduce the time from the application stage to financial close.

6. Non-Recourse Loan – DOE must ensure that “the prospective borrower has pledged project assets and other collateral or surety, including non-project related assets determined by the DOE to be necessary to secure the repayment of the Guaranteed Obligations” (§609.10(d)(10)).

*Comments:* It is recommended that the proposed rule be modified to only require the sponsor to pledge project assets, contracts and agreements as security for a loan, which is consistent with practices in commercial project finance and other federal loan guarantee programs. Certainly, where projects in the nuclear and coal sectors are concerned, the projects costs will be sizable, as much as \$5 billion or more in some cases. In these instances, the sponsors will have sizeable first loss positions through their equity contributions, making the prospect of providing additional collateral untenable.

## **B. Subsidy Costs**

1. Calculation – On or prior to the closing date, OMB must review and approve DOE’s calculation of the subsidy cost (§609.9(d)(3)).

*Comments:* Consistent with other federal loan guarantee programs, DOE and OMB should ensure that there is a transparent methodology to calculate subsidy costs, and such costs should be reasonable and commercially viable.

It is recommended that DOE calculate subsidy costs based on credit risk parameters and project evaluation techniques used by Ex-Im and OPIC. The two agencies, which provide loan guarantees to finance projects in often risky markets are able to achieve the twin goals of setting fees for loan guarantees on commercially acceptable terms and at the same time to remain on a self sustainable footing by utilizing well established credit evaluation procedures customarily used in project finance. These include:

- Selecting projects that have experienced and committed sponsors, and other participants including contractors and off-take parties;
- Utilizing rigorous credit analysis procedures founded on risk-based evaluation criteria, and,
- Selective use of outside financial, technical and legal advisors, whose fees are paid by the sponsors, to assist in credit evaluation, negotiation, documentation and post disbursement monitoring of projects.

As an indication of the sustainability of the two agencies, in FY 2006 and FY2005, Ex-Im generated net surpluses of \$1.4 billion and \$1.7 billion, respectively. For the same periods, OPIC reported a net profit of \$330 million and \$221 million, respectively.

Finally, it is also important that DOE be in a position to provide project sponsors with a reasonably accurate estimate of the subsidy costs early in the application process to enable them to estimate and justify their project development and investment budgets.

2. Exclusion from Project Cost – Subsidy cost (as well as administrative fees) is excluded from project costs (§609.12(c)(7)).

*Comments:* Other federal loan guarantee programs, including those of Ex-Im Bank and OPIC, treat subsidy and administrative costs paid by the borrower as legitimate project costs eligible for financing. It is recommended that DOE reconsider its position on this issue.

### **C. Eligible Technologies**

1. General use – DOE proposes two alternatives of interpreting “general use.” A technology would be considered in general use and, therefore, not eligible if one of the following alternatives were true:
  - Alternative 1 – the technology has been ordered for, installed in, or used in five or more projects in the U.S.
  - Alternative 2 – the technology has been in operation in a commercial project in the U.S. for a period of five years, measured from date of commissioning (§609.2).

*Comments:* It is important to make these alternatives clear in the DOE loan guarantee coverage, especially with regard to nuclear power. The main technologies being considered for deployment in the United States (GE’s ABWR and ESBWR, Westinghouse’s AP1000, and AREVA’s EPR) have never been built in the United States, and they represent an evolutionary design for the industry. Further, each NSSS design should be judged individually for the purposes of evaluating alternatives 1 and 2. The “general use” explanatory language must be clear in distinguishing new generations or new applications of a technology, such that the aforementioned Gen III and Gen III+ designs are not somehow excluded by that fact that over 100 nuclear plants have been built in the United States, albeit with different designs and in a much different industry and regulatory environment. For the US nuclear industry and for the financial community, the Gen III and Gen III+ designs represent a first-of-a-kind technology. A similar concern exists for IGCC technology.

We suggest that the Alternatives 1 and 2 be combined to read:

“The technology or combination of technologies have been ordered for, installed in, and used in five or more projects in the U.S., each for a period of five years, measured from date of commissioning”.

Also, we recommend that there should be a set of metrics for determining that a specific technology has successfully met design and performance specifications during the first five years of operation.

2. New or Significantly Improved – The NOPR defines a new or significantly improved technology as one that has either “only recently been discovered or learned” or that involves meaningful and important improvement in the productivity or value of the technology” (§609.2).

*Comments:* The NOPR definition seems to require that the technology be both “new or significantly improved” and not in general use in the commercial market place in the U.S. This is contrary to the statutory language which provides that the test for new or significantly improved is “as compared” to commercial technologies in service in the U.S. at the time the guarantee is issued. Please also note our comments in Section C.1, immediately preceding.

#### **D. Lender Issues**

1. Duty of Care – The NOPR states that eligible lenders shall exercise “the level of care and diligence that a reasonable and prudent lender would exercise when reviewing, evaluating, disbursing and servicing a loan made by it without a federal guarantee”, including “ensuring” that the collateral package remains “uncompromised” (§609.11(b)).

*Comments:* We question whether the monitoring and reporting obligations are consistent with standard practice in capital markets transactions.

It is standard in loan documentations for the agent and lenders to limit their liability, except in the case of gross negligence and willful misconduct. It is not realistic to expect lenders to assume greater liability. An ongoing obligation of due diligence and care could effectively result in the guarantee being conditional.

2. Audit Provisions - The NOPR states that DOE may from time to time audit any or all items of costs included as Project Costs and may exclude or reduce the amount which it determines to be unnecessary or excessive or otherwise not to be an item of Project costs (§609.17(b)).

*Comments:* After-the-fact audits which could result in reducing the amount of project costs and therefore the amount of the guarantee coverage effectively makes the guarantee a conditional instrument.

It is customary in project financing to have an independent engineer review and provide certification of costs prior to each loan disbursement during the construction

period. Once a loan disbursement is made pursuant to such procedures, the guarantee of such disbursement should be unconditional and should not be subject to a reduction in a post disbursement audit.

3. Full Faith and Credit and Incontestability – The full faith and credit of the United States is pledged to the payment of all Guarantee Obligations issued in accordance with this part with respect to principal and interest. Such guarantee will be conclusive evidence that it was properly obtained; and that the underlying loan qualified. Such guarantee will be presumed to be valid, legal and enforceable but for fraud or material misrepresentation of the holder (§609.14).

*Comments:* Recommend that DOE confirm with lenders that, except for fraud or misrepresentation, the guarantee language will not be viewed as affecting the unconditional nature of the guarantee, or the ability to place it in a securitization vehicle (in the event 100% or no stripping provisions are modified).

#### **E. Other Government Assistance**

1. Multiple Forms of Federal Assistance – DOE to consider whether project relies on other government assistance and will seek to minimize support for projects that rely on multiple forms of significant assistance. Generally desirable that each project receive only one form of assistance. Multiple forms will be a negative factor (§609.7(b)(9)).

*Comments:* Multiple forms of governmental assistance should not be a negative factor. Tax and other incentives are intended to be complementary, not exclusive, and multiple forms of governmental assistance could enhance a project's economics and creditworthiness. The subsidy model should reflect the benefits of multiple incentives (e.g. standby support and tax credits) and adjust the subsidy costs to reflect the reduced risk of default.

2. Tax Exempt Debt – The NOPR states that prior to the execution of the Loan Guarantee Agreement DOE must ensure that “the loan guarantee does not finance, directly or indirectly , tax exempt debt obligations” (§609.10(d)(7)).

*Comments:* It is recommended that DOE consider eliminating this provision, since it has the potential to exclude many municipal and cooperative electric utility companies that rely heavily on tax exempt financing.

#### **F. Miscellaneous**

1. Solicitation Process – The NOPR requires DOE to issue a solicitation to start the loan guarantee process (§609.3(a)). DOE has ability to tailor specific solicitations to certain types of projects. DOE will not consider unsolicited applications.



*Comments:* The loan guarantee program should be implemented as an open application process and should not be subject to an arbitrary solicitation cycle or other limitations that could interfere with an applicant's development timetable.

2. Application Process – Requires a five-step process – preliminary application, invitation to submit an application, issuance of a term sheet by DOE, execution of a conditional commitment, and final loan agreement. DOE may skip the Pre-Application stage (§609.3(a)).

*Comments:* This process is unnecessarily lengthy and cumbersome. A three step process is sufficient: application, conditional or preliminary commitment, and final loan agreement. Again, this is the application process followed by other federal agencies.